Neither weak nor simple: Adjusting our perception of Islamic manuscript structures

by Karin Scheper University Library Leiden

Introduction

Codices from the Islamic world have often been admired for their beauty and maligned for their faulty structure. When compared with 'the Western book', the Islamic manuscript structure is usually classified as inferior. The opinion that Islamic bindings cannot adequately protect the manuscript, although they were designed and decorated exquisitely, seems to be of Western origin.[1] This perception has been disseminated rather widely, as most of the relevant literature on Islamic manuscript structures originated in the West.[2] As a consequence, it has influenced the decision-making of many a conservator working with Islamic books.

Leiden University Library (UBL) has significant holdings of Oriental collections. Most Islamic manuscripts are kept in the Arabic manuscript section, although they can also be found in the Southeast Asian collections.[3] The physical condition of the manuscripts and their continued use necessitated a conservation plan, which became one of my tasks when a conservation workshop was established in the library in 2000. Being trained as a conservator in the Western tradition and lacking experience with oriental material, I had to base my understanding of these manuscripts on the literature just mentioned. At first my perception of the characteristics and weaknesses of these manuscripts reflected the general notion that these structures failed in terms of strength and durability. After examining and treating quite a few items, however, it appeared that the available literature on structures and techniques concerning this specific bookbinding tradition did not really, or at least certainly not always, correspond with the objects I had on my workbench.

These conservation treatments created a unique opportunity to examine the composition of these objects more closely. As I had already begun to have doubts about some statements encountered in the literature, I focused on the construction of the bindings. I was familiar with the studies of Gulnar Bosch, the multiple contributions of Adam Gacek and François Déroche's *Codicology*.[4] The importance of their work cannot be overestimated and forms the foundation of many later contributions, and for me too they provided an entrance into the field and a solid basis for further study. These scholars were themselves no craftsmen, however, and their studies were mainly conducted from a linguistic and cultural-historic perspective. As a conservator, my starting point is the materiality, which allowed for a combination of theory and practice.

One of the general assumptions that troubled me most was the often repeated statement that the Islamic codex is a case-binding structure. Of course, unlike the archetypical Western case-binding the Islamic binding does not have a hollow spine, but the binding is described to be made as a cassette, apart from the textblock, and only applied to it when finished as a separate entity, by adhering the spine of the cover to the textblock spine. It appeared, however, that there is ample physical evidence that many Islamic bindings are not case structures at all. While working on damaged manuscripts from the UBL collection many examples diverging from the standard description were found, so I decided to carry out a pilot survey on the collection. Some of those findings were presented in Horn at the conference 'New approaches to book and paper conservation' in 2011, and further elaborated on at The Islamic Manuscript Association's conference later that same year.[5] The pilot proved so rewarding that it was decided to take it further and survey the UBL's complete Arabic manuscript collection.

The Leiden collection is fairly representative of the bookbinding tradition in the Islamic world, covering more or less a thousand years of manuscript production and all geographic areas. In addition, a fair number of these manuscripts still retain their original bindings or at least bindings made in the Islamic world. These original constructions were all selected for the assessment. In total, a good 1000 volumes have been examined and recorded, and the image of the Islamic bookbinding tradition resulting from this indeed affects the common description. It is not possible to address the particularities of the survey's outcome in much detail within the scope of present paper, however.[6] The central question

here is *why* Islamic bindings have come to be described as simple structures, and for what reason they are generally regarded as being inferior to 'the Western book' in terms of strength of structure. To understand the disparagement of Islamic bindings we will have to look at the developments in both traditions.

Bookmaking in the West

The reason for putting 'the Western book' in inverted commas is that one cannot typify the Western codex in a single technical description: there is no archetypal 'Western' book. Its development shows major changes over the centuries, and it is not possible to summarise these changes or the varieties in Western bookbinding structures succinctly without doing great injustice to their diversity. Nevertheless, one could simplify Western bookbinding history by saying that it started with solid structures and sound materials, which over the centuries changed to weaker and less durable constructions made with materials of gradually diminishing quality. Western binders compromised as the demand for books increased – beginning in the sixteenth century – which eventually led to the decline of the craft.

Carolingian and Romanesque structures were stable constructions. The gatherings were sewn on double sewing supports made of thick cords or alum-tawed skin. Strong sewing thread passed through these gatherings and around the supports from almost head to tail (and vice versa). Endbands were then sewn around endband cores, again including every gathering in the sewing structure. Then the wooden boards, which were flush with the textblock in that period, were attached by lacing the support slips through the edges of the boards. The slips of the endband cores were laced in as well to stabilise the board attachment at head and tail. Although in the gothic period the lacing pattern changed, and the boards were worked so as to better fit the shape of the textblock, early specimens share characteristics such as the double supports with herringbone or straight packed sewing, laced-in endband-slips and primary endbands that connect all gatherings. But practice changed quickly to time-saving methods. The structural function of the endband diminished: the anchoring threads no longer connected all gatherings, nor did the slips of the core extend to be joined to the boards. Already in the first half of the six-

teenth century stuck-on endbands can be found, reducing the endband's function mainly to a light stabilisation of the textblock at head and tail.

From the middle of the sixteenth century examples can be found with double cords that were not sewn around with an eight-shaped loop; instead the process was sped up by sewing the double cords quickly with one big loop. Quite naturally these developments evolved in the use of thinner, single sewing supports. Additionally, a decrease can be observed in the amount of slips of the cords or leather strips that were used to attach to the boards; alternately the slips were laced in or cut off. As an additional method of economising, gatherings were sewn two-on, or a bypassing technique was used. Eventually the hollow spine was introduced, combining thin sewing supports and boards no longer laced-in but pasted-on.

The predominant Islamic structure

In the Islamic bookbinding tradition such a development in economising methods is not in evidence. In fact, compared with the Western development in structure and materials, the Islamic tradition could be described as very stable, if not conservative. The predominant structure with its flat spine and envelope flap[7] remained the same from the first specimens made after the period of so called in-box bindings, which came to an end in the tenth-eleventh century, to the late eighteenth or nineteenth century, when European influence started to alter the nature of the Islamic book trade and the production methods employed. Even then, changes in the Islamic book structure took place only very gradually.

The most common form of sewing was link-stitch sewing on two stations. This was combined with two essential elements which together form the construction: the spine-lining and the primary endband sewing, which provides two extra sewing stations in every gathering close to head and tail (Fig. 142).

This structure can be found throughout the Islamic world over the entire period. Islamic binders may have been pressed to economise, but they did not compromise and reduce the number of endband warps. Nor did they start using stuck-on endbands. If they needed to reduce costs they did it differently, but the basic, solid and functional sewing structure of the manuscript remained unaltered.

Fig. 142. *UBL Or. 17.143, a cloth lining and primary endband warps, applied after the textblock was sewn with a link-stitch; visible because the leather spine is missing.*

The opinion that the link-stitch sewing on two stations does not qualify – in Western eyes – as a proper sewing-structure may be due to the fact that in the Western world, books sewn in this manner were regarded as temporary bindings; the technique was used for schoolbooks, almanacs and similar publications with a short-term function. It should not be overlooked, however, that these more or less ephemeral Western products were not lined with strong material and provided with proper endbands, as is the case with Islamic manuscripts. This primary endband-sewing and lining ought to be considered an integral part of the Islamic book structure, a structure which is neither weak nor unstable.

Variations in Islamic book structure

The relative uniformity in structure does not mean that there is no variation to be found in the Islamic bookbinding tradition. There is an interesting variety of technical and material characteristics, also in sewing structure, but most of these variant types are more elaborate, and stronger, one could say. In that respect the predominant structure appears to be the

minimum basic structure: less was not acceptable, more an option. That binders sometimes selected the sewing schedule with care is illustrated by the use of one of those alternative sewing structures, link-stitch sewing on four stations (Figs. 143 and 144). This variety appears to be used mainly for the resewing of books; underneath the two stitches in the fold-line of the gatherings one can find the two holes of the former sewing stations. This indicates a deliberate choice to spare the weakened paper around these first sewing positions.

Fig. 143. *UBL Or. 656, link-stitch sewing on four stations.*

Other interesting varieties can be found in the application of the spine-lining material. Both leather and textile have been used, although with slight differences. The full-length spine-lining extends at the side of the joints, and in general these flanges were pasted onto the inside of the boards. Thus, the lining supports the paper gatherings when the primary endband is sewn and also strengthens the board attachment; in that respect no distinction was made between leather or cloth. Yet, the two materials were valued differently. When leather was used, the inner joint is invariably left visible, so apparently leather was not only appreciated for its strength, but also aesthetically (Fig. 145).

Fig. 144. *Sewing scheme typical for the Islamic link-stitch over four stations.*

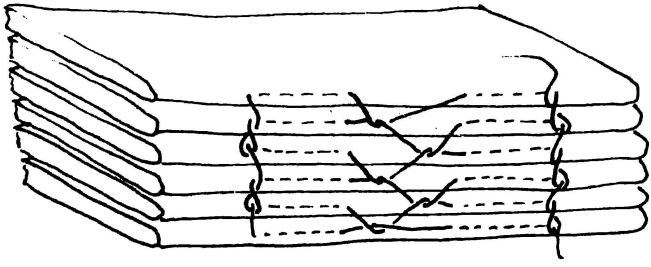
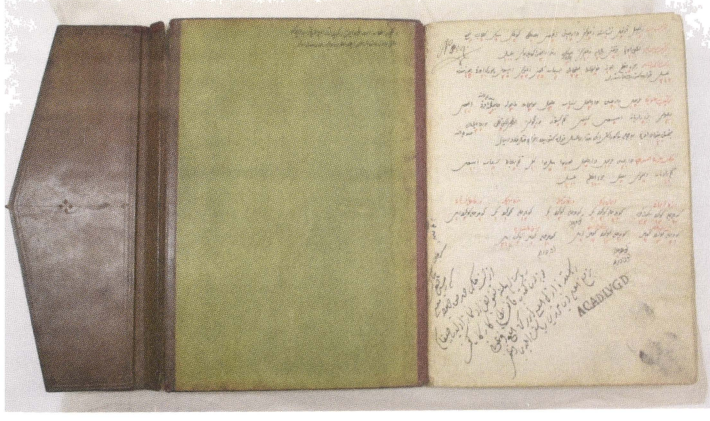
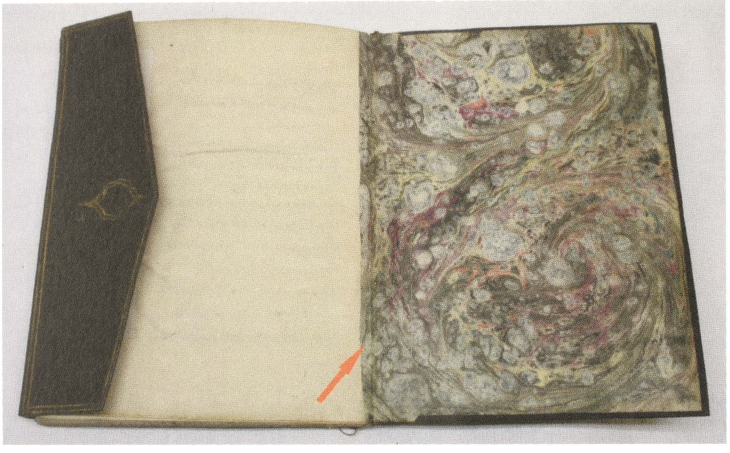


Fig. 145. *UBL Or. 854, leather inner joints that are part of the spine-lining.*



However, when cloth was used, the inner joints are consistently covered with the doublure material or additional strips of paper or leather (Figs. 146 and 147).

Fig. 146. *UBL Or. 898, cloth lining flanges not visible; the inner joint is covered with the stub of the doublure, indicated with the arrow.*

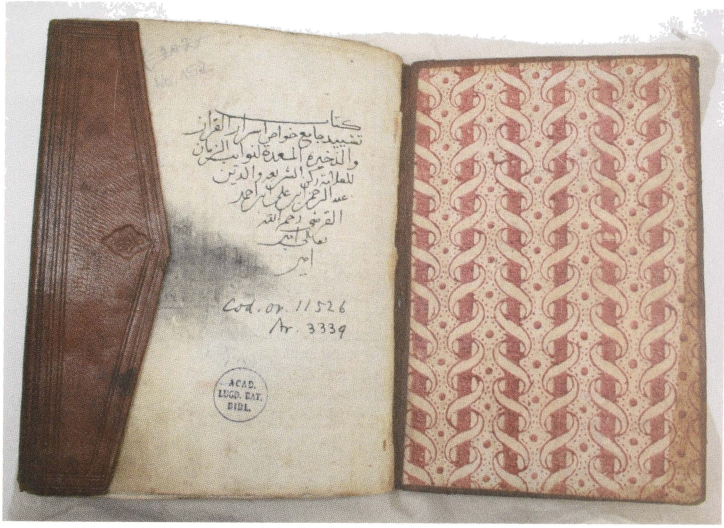


Another difference is that the textile flange in some cases was not pasted onto the inside of the boards, but onto the outer leaves of the textblock. The reason for this is not yet clear, but it may be that binders noticed that cloth linings became detached from the textblock spine more easily than leather linings and that this process could be impeded when the extending sides were pasted onto the textblock instead of the boards. Whichever method was employed, with cloth linings the actual structure is always disguised by the stub of the paper doublure, the stub of a tipped-on flyleaf or an extra strip of material covering the inner joint.

Misinterpretation of the evidence

The perception of the Islamic binding as a case-binding may result from a misinterpretation of the evidence. In particular the use of leather as spine-lining material must have caused confusion, for in Western bookbinding

Fig. 147. *UBL Or. 11.526, cloth lining flanges are covered with strips of leather.*

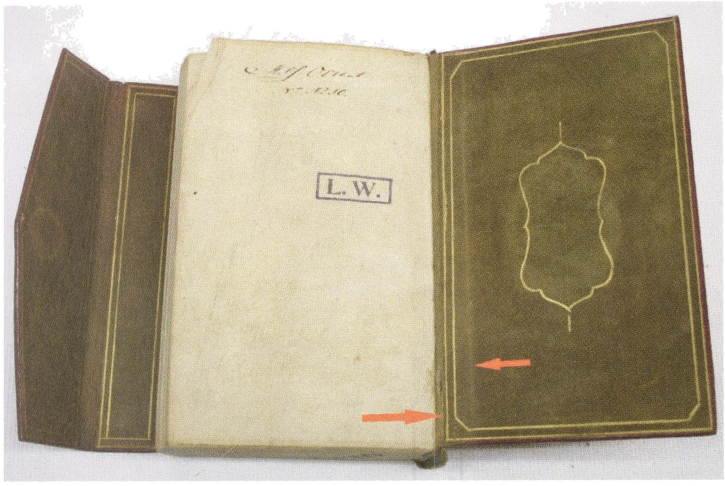


the use of leather is almost solely reserved for covering the boards. It has, of course, been used as binding supports, but not – since the Carolingian and Romanesque period – as spine-lining material. Moreover, the way Islamic binders applied this particular piece of leather is completely the opposite of the 'Western way', as the leather is affixed to the textblock on the hair-side.

The reason for applying the leather in that manner is clear. As described above, the extending sides of the lining were subsequently used to strengthen the board attachment, while part of these flanges remained visible as the inner joint. For aesthetic as well as practical reasons, the outward surface of this small strip of leather in the joint is preferably the hair-side. Not only is this side the embellished side, when leather doublures are used the grain patterns match nicely, and the seam between both pieces does not catch the eye (Fig. 148).

The practical reason for applying the leather in this particular way is that the inner joint is subject to flexing; the fibrous surface of the flesh

Fig. 148. *UBL Or. 1210, leather inner joint, separate leather doublure. The edge of the doublure is indicated with the left arrow, the right arrow points at a slight swelling and discolouration in the doublure leather, caused by the end of the leather flange underneath.*



side of leather would be more vulnerable to damage, delaminating and incrusted dirt. Notwithstanding these good reasons, to many Western observers it is highly unusual to adhere leather on the hair-side. Consequently, when they see detached covers the obvious conclusion is that this spine leather belongs to the interior of the cover. Therefore, at least for those familiar with Western book structures and materials, the leather interior of the spines of loose Islamic covers is not always recognised as being part of the initial construction of the textblock (Fig. 149). Instead, it is seen as the finishing of the cover, which has led to the conclusion that the cover was a cassette-like structure.

The other cause for misinterpretation is the fact that leather inner joints also occur in Western bookbinding; they can frequently be found in eighteenth- and nineteenth-century books. Their structural function is, however, not comparable to the structure of Islamic manuscripts. Western binders added small leather strips either around the endleaf units, in

Fig. 149. *UBL Or. 774, loose cover to which the leather spine-lining is now attached, except for the outer ends at head and tail that are still stuck underneath the primary endband warp threads.*

which case they are sewn with the textblock, or they were simply pasted across the joint, resulting in a more or less purely decorative element. The construction of the leather joints in Islamic manuscripts – coming from the spine-lining – is rather distinctive, but when they are not recognised as such they are easily misjudged by those familiar with the Western version of a leather joint (as in Fig. 145).

The assumption that Islamic bindings are case-bindings has contributed to the idea that the manuscripts were made as simple items, for in Western bookbinding the case-binding represents a lower product of the trade, associated with economic production and edition binding. The scope of intellectual development in the Islamic world has been put forward as contributing to the development of this 'simple' Islamic book structure. And indeed, given the relatively high literacy and the subsequent demand for bound books, Islamic binders needed to cope with

Fig. 150. *UBL Or. 783, two-pieces technique, the overlap on the spine is visible because the leather started delaminating.*

a steady and fairly high demand of production. The situation cannot, however, be compared with the circumstances in the West that led to the development of the case-binding.

For one thing, the introduction of the printing press in the Islamic world did not occur before 1729.[8] Before that, binders only dealt with manuscripts. And because of that, every single item had its own unique requirements. Format and thickness might have been similar, but seldom would binders have had a commission to bind exactly identical manuscripts. Therefore, case-bindings as we know them in the West are not found in Islamic bookbinding. Every single item was produced as an individual, custom-made product.

Tailor-made artefacts

As such, the two-piece technique is a good example. Many full leather bindings are not made with one, but with two pieces of leather. They overlap on the spine, and the leather edges are often pared so smoothly that the seam is hardly visible (Fig. 150). The most probable reason for the use of two pieces of leather is that it allowed the binder to prepare

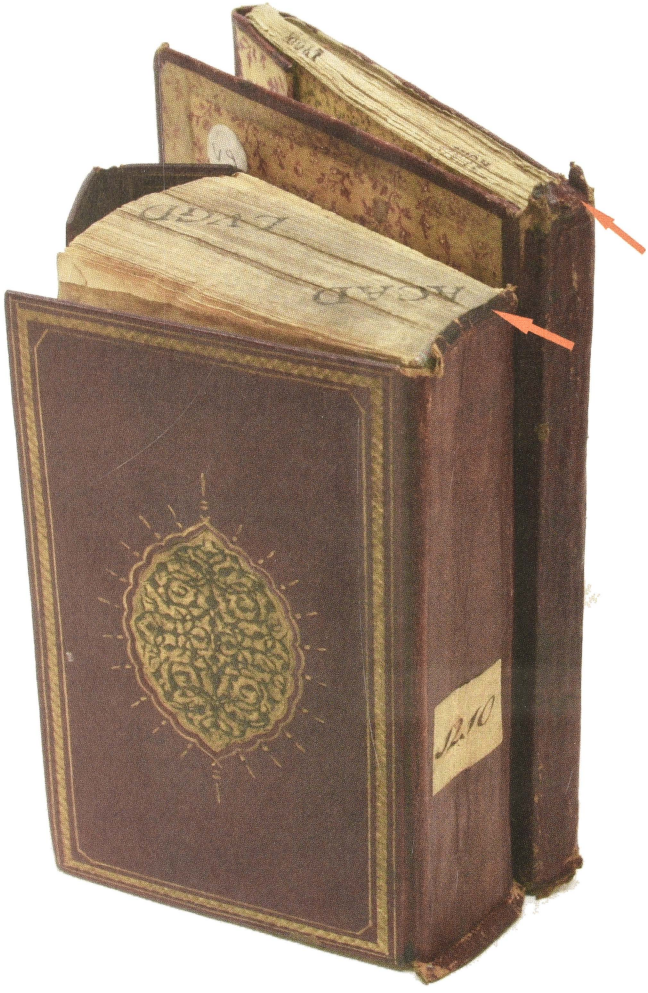
the boards separately and individually – the back board with the fore-edge and envelope flap – which would help to concentrate fully on the delicate and highly elaborate tooling of the covers. After that they were attached to the textblock one by one, by adhering the extending part of leather on the spine-side, which was thinly pared. This method allowed for a controlled positioning of the boards. The extending parts of the covering leather on the spine-side were rubbed together on the spine with a bonefolder or similar tool. Thus, even though the separate boards can be covered prior to textblock attachment, this structure is quite clearly not a case-binding.

There is another reason not to consider the Islamic manuscript a case-binding, and that is that the bulk of bindings were made with tabbed spines. Tabs are the small pieces of the leather spine, extending at head and tail (Fig. 151). Turned-in spine endings appear to be an absolute exception; the tab exists because the binder cut the leather at the joint, before making the turn-ins over the boards. Now what does a tab indicate?

If the binding had been prepared as a cassette, covered with leather prior to attachment to the textblock, it would have been much easier and quicker to just turn in the spine-endings too, together with the turn-ins over the boards. The fact that this was not done indicates a different procedure: the leather was first applied onto the spine of the textblock and only then pasted onto the boards, already positioned on the textblock. In order to then make the turn-ins over the board edges, the binder would have needed to cut the leather at the positions of the joints, since the complete adhesion of the spine leather onto the textblock spine prohibits making a turn-in continuous over the spine.

Making a mock-up of a partially leather binding – the type that occurred increasingly since the sixteenth century, revealed the practical process even better. Had these bindings been made as a separate entity, binders would certainly have economised and simplified the operation by turning in the leather across the spine. Also, since the overlapping part of the leather on the boards is only small, it would have been necessary to do so to prevent the leather from becoming detached from the paste-boards. The tab follows from adhering the leather first on the textblock spine and then onto the edges of the boards. The binder would surely have waited until the adhesive had dried and the leather was firmly set on the spine and board edges. Only then would he have proceeded, first with making

Fig. 151. *UBL Or. 1210 and 11.955, two manuscripts with tabbed spines.*



the cuts at the joints and then with turning the leather at head and tail over the edges and onto the inside of the board.

Conservation considerations

It is important to acknowledge the variety and complexity in the construction of Islamic manuscripts because the false notion of its weakness has led to conservation treatments intended to 'improve' the binding structure. There is, however, no need to bring sewing structures 'up to Western standards'. When damage to the construction necessitates an intervention, the original manufacturing procedure provides sufficient options for strengthening. It is certainly not an improvement to make a turn-in at head and tail of the spine or to apply a paper hollow in the spine. Turn-ins and hollow spines do not belong to the Islamic bookbinding tradition. Such an intervention would destroy evidence, alter the appearance and subsequently the tactility of the object. It would turn it into a hybrid structure.

Also, whenever the inclination is felt to adapt a construction, the current circumstances of the use of these items in our institutions should not be forgotten. In comparison with the extensive use these manuscripts endured while still in circulation, current usage is extremely light, and treatments should reflect that.

Chalk and cheese?

In view of the decline in the Western bookbinding tradition and the consistent quality of the Islamic tradition until the early nineteenth century, it is remarkable that the Islamic book, in terms of strength and durability, should so often have been judged as inferior to the Western book. Comparing the two traditions has shown that one's frame of reference can be misleading when isolated features are judged outside their proper context. When considering Islamic manuscripts, Westerners have often questioned the 'simple' sewing structure and subsequent board-attachment, and wondered why Islamic craftsmen did not anticipate the frequent failure of that structure and improve upon it – meaning, of course, by adopting the Western way of doing things.

Conversely, I have never heard it asked why Western binders pertinaciously continued in using covers larger than the textblock[9] – introduced when books were still kept lying flat – long after books came to be stored upright. This frequently resulted in the sagging of the textblock, first at the front-edge. Subsequently, the spine at head-side became concave, and tension on the joints caused tearing of the covering material or even the sewing supports in the joint. Many textblocks completely dropped on their bottom edges. Over the seventeenth and eighteenth century, binders stopped using fastenings or laces at the front-edge that would stabilise the position of the textblock in the binding, but they did not adjust the format of the boards. No matter how heavy the textblock, boards needed to be square. With the exception of some specific genres like schoolbooks, this remained the norm until the advent of the machine-made paperback. Why did the Western binder not take notice of his Oriental colleague who, for good reason, chose to bind his books in boards flush with the textblock?

This illustrates the imbalance that accompanies our view of the Islamic manuscript heritage. The Western perspective with its cultural baggage often affects what is actually observed, thus blurring the judgment. The Western way is regarded as superior to the Eastern tradition, if only for the reason that the Western tradition shows development and change. That change is not necessarily the same as improvement is easily disregarded. The second difficulty is that we easily fail to recognise the flaws in the products of our own tradition, whereas the weaker aspects of 'the other' tradition are effortlessly pointed out.

The separate binding features belonging to these different book cultures cannot be compared indiscriminately. The individual components and specific techniques that characterise the Islamic manuscript only together form the composite artefact, with its specific structure and accompanying technical capacities. Accordingly, only when we perceive these manuscripts for what they really are can we aim to understand the material information they carry and preserve them as artefacts in all their aspects.

Notes

1. Gulnar K. Bosch, John Carswell & Guy Petherbridge, *Islamic bindings and bookmaking* (Chicago, 1981), one of the authoritative publications, states, for example: 'Noteworthy in Islamic manuscripts is the frequent use of a sewing thread, of linen or often silk [...], which is much too thin for the binding function it should perform, and which characteristically breaks down. Also usually only two sewing stations are used, unrelated to whether the format or weight of the book requires sewing support at more points' (p. 46), and 'Regardless of the sequence of operations used to construct it, the Islamic book cover [...] can be considered as a separate structural unit – as the fact that so many covers have survived intact, but separated from their original textblock, abundantly witness' (p. 56).
2. See for example Sylvie L. A. Merian, 'The structure of Armenian bookbinding and its relation to Near Eastern bookmaking traditions', *PhD diss.* (Columbia University, 1993), pp. 159, 167; J. A. Szirmai, *The archaeology of medieval bookbinding* (Aldershot, 1999), pp. 56–57.
3. The objects all have an 'Or.' shelfmark, for Oriental; they are further divided to region and language. The Arabic collection comprises around 6,000 volumes, the Southeast Asian collection ca. 18,000, although only a minority of the latter are written in Arabic script. See the website www.library.leiden.edu/special-collections/oriental-collections/ .
4. Gulnar K. Bosch, 'The staff of the scribes and implements of the discerning: an excerpt', *Ars Orientalis* 4 (1961), pp. 1–13; Bosch, *Islamic bindings*; Adam Gacek, 'Arabic bookmaking and terminology as portrayed by Bakr al-Ishbīlī in his 'Kītāb al-taysīr fī ṣināat al-tasfīr', *Manuscripts of the Middle East* 5 (1990–1991), pp. 106–13; 'Ibn Abī Hamīdah's didactic poem for bookbinders' *Manuscripts of the Middle East* 6 (1992), pp. 41–58; 'Instructions on the art of bookbinding attributed to the Rasulid ruler of Yemen Al-Malik al-Muzaffar', *Scribes et manuscrits du Moyen-Orient* (Paris, 1997), 57–63; *The Arabic manuscript tradition: a glossary of technical terms and bibliography* (Leiden, 2001); *The Arabic manuscript tradition: a glossary of technical terms and bibliography: supplement* (Leiden, 2008); *Arabic manuscripts: A vademecum for readers* (Leiden-Boston, 2009); François Déroche, *Manuel de codicologie des manuscrits en écriture arabe* (Paris, 2000); *Islamic codicology: An introduction to the study of manuscripts in Arabic script* (London, 2006).
5. Karin Scheper, 'Refining the classification of Islamic manuscript structures', in: Patricia Engel et al., eds., *New approaches to book and paper conservation-restoration* (Horn/Vienna, 2011), pp. 357–88; the TIMA paper was published as 'Three very specific binding features, shedding new light on Islamic manuscript structures', *Journal of Islamic manuscripts*, 4 (2013), pp. 82–109.
6. The full results from this survey as well as a detailed analysis of the literature will be included in the doctoral thesis currently being prepared by the author.
7. Déroche, *Islamic codicology*, pp. 260–261 and 289–290; Gacek, *Vademecum*, pp. 25–27.
8. See for example Meliné Pehlivanian & Siegfried Schmitt, *Exotische Typen: Buchdruck im Orient – Orient im Buchdruck* (Berlin, 2006), pp. 68–110.
9. Square boards appeared in the course of the fifteenth century and soon became standard practice, see Szirmai, *The archaeology of medieval bookbinding*, p. 218.